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APPROVAL SIGNATURES		DATE
Gregory Blaney (original signature on file)	Management System Representative	10/10/2005

REVISION HISTORY			
Rev. No.	Description of Change	Author	Effective Date
Basic	Initial Release	John Griggs IT/204	08/26/98
A	Format Changes	John Griggs IT/204	09/11/98
B	Consolidation of forms	John Griggs IT/204	01/28/99
C	References to Ames Quality Manual replaced with references to IV&V Facility Quality Manual Updated Section 6.4	John Griggs IT/204	09/10/99
D	Format and Number changes; Delete Reference to Ames Research Center	Griggs	12/06/00
E	Remove reference to Ames, minor changes to Audit procedure	Griggs	04/19/01
F	Response to audit finding 2001-C-77, define “immediate”	Griggs	08/29/01
G	Clarify use of Form IVV 1005; Formatting and numbering corrections	Griggs	10/21/02
H	Clarify criteria for internal audit content determination	Griggs	03/05/03
I	Update flow chart and change Sections mentions of sequential audit tracking number to audit date.	Ferguson	02/07/05
J	Updated document to reflect: change of QMS to IMS, delete audit checklist reference, and the addition of Auditor Database references.	Ferguson	10/13/2005

REFERENCE DOCUMENTS	
Document Number	Document Title
Form 1005	Finding Report
IVV QM	IV&V Facility Quality Manual
IVV 14	Corrective and Preventive Action
IVV 16	Control of Quality Records
IVV 18	Training
NPR 1441.1	NASA Records Retention Schedule

1.0 Purpose

This system level procedure (SLP) defines the NASA IV&V Facility's Internal Assessment Audit Program. This SLP describes how internal audits of the NASA IV&V Facility Management System (IMS) shall be planned, scheduled, and conducted. This SLP also defines how internal audit results will be documented and reported to Facility Management to ensure that:

- The IMS is compliant with the requirements of the International Organization for Standardization (ISO) 9001:2000 Standard.
- The IMS effectively implements the Quality Policy and conforms to the Quality Manual (QM).
- Documented plans, SLPs, and work instructions (WIs) reflect the NASA IV&V Facility's current operations, responsibilities, and products.
- Personnel, processes, products, and services comply with documented requirements.
- Corrective and preventive actions are systematically identified to improve the IMS process and performance.

2.0 Scope

This SLP applies to the IMS and its processes that directly affect the quality of products and services delivered to Customers.

3.0 Definitions and Acronyms

3.1 Auditee

An Auditee is any person or Functional Organization being audited.

3.2 Auditor

An Auditor is a NASA IV&V Facility civil service employee that has been formally trained in audit methods and objectives.

3.3 Auditor Database

The Auditor Database is a Microsoft Access database used by internal Auditors to record, store, and report internal audit findings and results.

3.4 Audit Manager

The Audit Manager is a NASA IV&V Facility civil service employee who is responsible for managing the Internal Assessment Audit Program.

3.5 Audit Report

The Audit Report is a report compiled and completed by the Audit Manager at the end of an internal audit that consists of individual reports prepared by the Lead Auditor and Auditors. The Audit Report documents all phases and aspects of the internal audit, including, but not limited to, in and out-brief attendance, findings, schedule, auditor notes, and resulting actions.

3.6 Commendation

A commendation cites an exemplary system or process of the Auditee.

3.7 Corrective and Preventive Action System (CAR/PAR System)

The CAR/PAR System is a database used to track and document the NASA IV&V Facility's corrective action requests (CARs) and preventive action requests (PARs). In the context of this SLP, the CAR/PAR System is also known as TrackWise.

3.8 Customer

A Customer is the purchaser, user, or recipient of a product or service provided by the NASA IV&V Facility. A Customer can be internal or external to the NASA IV&V Facility.

3.9 Director

The Director is a NASA IV&V Facility civil service employee who manages the NASA IV&V Program and leads the operations of the NASA IV&V Facility.

3.10 Facility Management

Facility Management is a group of NASA IV&V Facility civil service employees who hold official management positions at the NASA IV&V Facility.

3.11 Functional Lead

The Functional Lead is a NASA IV&V Facility civil service employee who manages a Functional Organization within the NASA IV&V Facility.

3.12 Functional Organization

A Functional Organization consists of a group of hierarchically organized personnel who perform work for one of the NASA IV&V Facility's primary business functions.

3.13 IMS Representative (MSR)

The MSR is a NASA IV&V Facility civil service employee designated by Facility Management responsible for the establishment, implementation, and maintenance of the IMS.

3.14 Internal Assessment Audit Program

The Internal Assessment Audit Program establishes how audits of the IMS shall be planned, scheduled, and conducted, and how audit results shall be documented and reported to Facility Management.

3.15 Lead Auditor

A Lead Auditor is a NASA IV&V Facility civil service employee that has been formally trained in an accredited Lead Auditor class, and/or

possesses sufficient audit experience or on-the-job training as determined by the Audit Manager.

3.16 Nonconformance

A nonconformance represents a lack of compliance with a specified process or procedure associated with the IMS, a nonconforming product, or a deficiency in the IMS itself. For the purposes of this SLP, nonconformities are categorized into three levels of severity.

3.16.1 Major Nonconformance

A major nonconformance is characterized by one or more of the following:

- An IMS deficiency
- An issued nonconforming product has a significant effect on Customer success, safety, or resources
- A lack of documented procedures
- A documented procedure is not being implemented consistently
- A series of minor nonconformities indicating an overall IMS deficiency that has an adverse effect upon overall product quality

3.16.2 Minor Nonconformance

A minor nonconformance is characterized by a defined system with an acceptable level of implementation having one or more of the following:

- Minor discrepancies or lapses in discipline
- An issued nonconforming product has little or no effect on the Customer

3.16.3 Observation

An observation is characterized by one or more of the following:

- An issue noted by an auditor that may lead to a major or minor nonconformance if not corrected
- A suggestion to improve a process
- Editorial corrections to a procedure (e.g., typing errors, spelling errors, etc.)

3.17 Process Owner (PO)

The PO is a NASA IV&V Facility civil service employee whose job duties are related to a procedure. The PO is assigned by Facility Management to be the lead of an established SLP or WI.

3.18 Quality Manual (QM)

The QM is a document that defines the manner in which the NASA IV&V Facility implements the IMS. The QM defines the relationships between ISO 9001:2000 Standard requirements and IMS procedural documents.

3.19 Quality Policy

The Quality Policy is the course of action intended to influence and determine decisions, actions, and other matters relating to the NASA IV&V Facility's commitment to providing superior quality products and services, through continuous improvement, that meet or exceed Customer requirements.

3.20 Recommendation

A recommendation is a proposal to improve the effectiveness of operating practices.

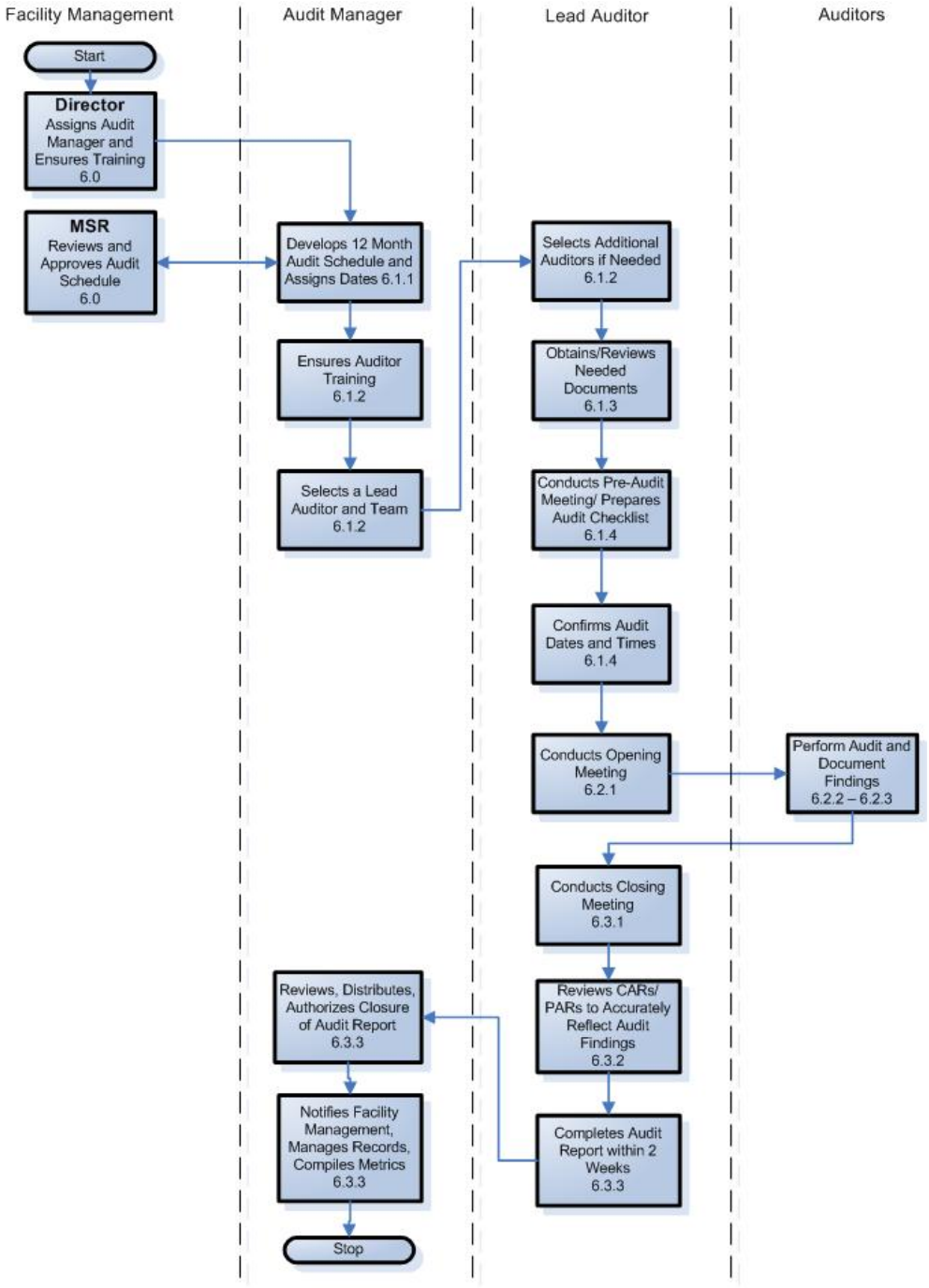
3.21 TrackWise

TrackWise is the NASA IV&V Facility's action tracking system. In the context of this SLP, TrackWise is also known as the CAR/PAR System.

3.22 Acronyms

CAR	Corrective Action Request
IMS	NASA IV&V Facility Management System
ISO	International Organization for Standardization
MSR	IMS Representative
PAR	Preventive Action Request
PO	Process Owner
QM	Quality Manual
QMR	Quarterly Management Review
QMS	Quality Management System
SLP	System Level Procedure
WI	Work Instruction

4.0 Flow Chart



5.0 Responsibilities

5.1 Audit Manager

The Audit Manager shall:

- Ensure that the NASA IV&V Facility maintains a qualified audit staff.
- Define the NASA IV&V Facility's yearly audit schedule.
- Define the scope for each audit.
- Ensure that all areas within the IMS are audited at least yearly.
- Assign Lead Auditors and Auditors.
- Approve Audit Report and present findings to Facility Management.

5.2 Auditor

The Auditor shall:

- Perform internal audits.
- Document internal audit findings.

5.3 Director

The Director shall:

- Assign an Audit Manager to plan, schedule, and manage the Internal Assessment Audit Program.
- Ensure the Audit Manager has attended an accredited Lead Auditor class of the Registrar Accreditation Board.

5.4 IMS Representative (MSR)

The MSR shall:

- Review and approve the audit schedule.

5.5 Lead Auditor

The Lead Auditor shall:

- Facilitate the internal auditing process.
- Document internal audit results.

6.0 Procedure

The Director shall assign an Audit Manager to plan, schedule, and manage the Internal Assessment Audit Program. The Director shall ensure that the assigned Audit Manager has attended an accredited Lead Auditor class from the Registrar Accreditation Board.

6.1 Pre-Audit

6.1.1 Audit Schedule

The Audit Manager shall develop the NASA IV&V Facility's audit schedule. The Audit Manager shall secure the MSR's review and approval of the audit schedule.

The audit schedule shall:

- Cover approximately twelve months.
- Cover all aspects of the IMS during that twelve-month period.
- Be updated quarterly.

The depth and frequency of each audit is based on prior audit history and operational status of the Functional Organizations to be audited, as well as the status and importance of the processes within the IMS. The Audit Manager shall ensure audits are performed in accordance with the approved audit schedule. The Audit Manager shall assign an audit tracking date for each audit.

The Audit Manager shall ensure that the audit schedule is retained in accordance with Section 8.0, Records, of this SLP.

6.1.2 Auditor Appointment

The Audit Manager shall identify auditor training needs in accordance with IVV 18, Training. The Audit Manager shall ensure that all auditors receive formal training in audit methods and objectives. The Audit Manager shall also ensure that Lead Auditor candidates attend accredited Lead Auditor classes, and/or possess sufficient audit experience or on-the-job audit training.

For each area to be audited, the Audit Manager shall select a Lead Auditor and Auditors who are not directly responsible for the performance of the activity being audited. Once appointed, the Lead Auditor may also select additional qualified auditors if required by the depth and duration of the planned audit.

6.1.3 Document Assessment

The Lead Auditor/Auditors shall obtain and review all relevant documentation related to the Functional Organization to be audited.

6.1.4 Pre-Audit Meeting

The Lead Auditor shall hold a pre-audit meeting with the audit team, or prepare an audit checklist for the audit team that describes the applicable areas of audit concentration. The areas of audit concentration may be influenced by previous audit results. The Lead Auditor shall confirm specific audit dates and times with Auditees.

The Functional Lead shall then inform Functional Organization personnel of the time and scope of the audit.

6.2 Audit

6.2.1 Opening Meeting

At the beginning of the audit, the Lead Auditor, or designee, shall conduct opening meetings with Facility Management. These

meetings outline the Functional Organizations and their operational areas that are included in the audit.

6.2.2 Audit Execution

The Auditor shall audit the assigned Functional Organization or personnel (Auditee). The Auditor shall review the policies, plans, SLPs, and WIs applicable to the Auditee's responsibilities. The Auditor shall then determine whether the reviewed materials adequately address all applicable requirements in the QM. The Auditor shall interview appropriate personnel and determine whether actual practices conform to the requirements of the documented policies, plans, SLPs, and WIs.

The Functional Lead shall provide timely access to processes, products, and documentation needed by the Auditor. The Functional Lead shall also assist the Lead Auditor in clarifying any issues that arise during the audit.

Facility Management shall ensure all personnel cooperate with the Auditors.

6.2.3 Audit Documentation

The Auditor shall compile all findings and categorize them as major/minor nonconformities, observations, or commendations. The Auditor shall document the categorized findings, interviews, notes, recommendations, and observations in the CAR/PAR System and in the Auditor Database located on the shared network drive. If the CAR/PAR System or the Auditor Database is not available, Form 1005, Finding Report, should be used to document audit findings.

6.2.4 Disagreements

The Lead Auditor shall reconcile any disagreements between auditors and Auditees. When necessary, the Lead Auditor shall submit disagreements to the Audit Manager for reconciliation. In

such instances, the Audit Manager shall reconcile any disagreements between Lead Auditors (or Auditors) and Auditees.

6.3 Post Audit

6.3.1 Closing Meeting

The Lead Auditor shall conduct closing meetings with Facility Management. The Functional Lead shall assist the Lead Auditor in clarifying any issues that arise during the post-audit briefing.

6.3.2 Corrective and Preventive Action Items

The Lead Auditor shall review any CARs or PARs in the CAR/PAR System and amend them as necessary to accurately reflect the audit findings.

Audit findings will be documented and tracked in the CAR/PAR System as nonconformities, and will be acted upon as follows:

- A major nonconformance shall result in immediate* action.
- A minor nonconformance may require immediate action.
- An observation does not require immediate action.

** Nonconformance requires completion of the corrective actions, or submission and approval of a Corrective Action Plan, within two weeks (see IVV 14, Corrective and Preventive Action).*

Process Owners (POs) shall respond to any CARs/PARs in accordance with IVV 14, Corrective and Preventive Action.

Tracking and resolution of the action is controlled by IVV 14, Corrective and Preventive Action.

6.3.3 Audit Report

Within approximately two weeks of audit completion, the Lead Auditor shall provide an Audit Report and any CARs/PARs to the Audit Manager for review. The Audit Manager shall review the

Audit Report for clarity and completeness. The Audit Manager shall authorize closure of the Audit Report only after associated CARs/PARs are opened in the CAR/PAR System.

The Audit Manager shall notify Facility Management upon completion of the Audit Report, along with its associated shared network drive location. The Audit Manager shall ensure that the Audit Report is retained in accordance with Section 8.0, Records, of this SLP.

The Audit Manager shall compile and report internal audit metrics to Facility Management in accordance with Section 7.0, Metrics, of this SLP.

7.0 Metrics

Approximately quarterly, the Audit Manager shall report appropriate Internal Assessment Audit Program metrics to Facility Management during the Quarterly Management Review (QMR). Metrics associated with this SLP are established and tracked within the NASA IV&V Facility's Metrics Program.

8.0 Records

The following records are generated and filed in accordance with this SLP and IVV 16, Control of Quality Records, and in reference to NPR 1441.1, NASA Records Retention Schedules.

Document Name and Identification Number	User Responsible for Record Retention	Retention Requirement	Location
Audit Schedule	Audit Manager	3 years (minimum)	Auditing Folder on the Shared Network Drive
Audit Report	Audit Manager	3 years after closure	Auditing Folder on the Shared Network Drive